

one winding, [characterized in that] wherein the winding of at least one of the electric generators comprises a solid insulation system comprising at least two semiconducting layers, each layer constituting essentially an equipotential surface, and also intermediate solid insulation, wherein at least one of the layers has substantially the same coefficient of thermal expansion as the solid insulation.

Claim 2 (Amended), line 1, delete "characterized in";

Line 2, delete "that" and insert --wherein--.

Claim 3. (Amended) A plant as claimed in claim 2, wherein [characterized in that the] flux paths in the core of the magnetic circuit comprise at least one of [consist of] laminated sheet and[/or] cast iron and[/or] powder-based iron and[/or] forged iron.

Claim 4. (Amended) A plant as claimed in [any of claims] claim 1[-3], [characterized in that] wherein the solid insulation is built up of a cable [(6)] intended for high voltage, comprising one or more current-carrying conductors [(31)] surrounded by at least two semiconducting layers [(32, 34)] and intermediate insulating layers [(33)] of solid insulation.

Claim 5. (Amended) A plant as claimed in claim 4, [characterized in that] wherein the innermost semiconducting layer [(32)] is at substantially the same potential as the conductor(s) [(31)].

Claim 6. (Amended) A plant as claimed in [either] claim 4 [or claim 5], [characterized in that] wherein [one of] the outer semiconducting layer[s (34)] is

A3  
cond.  
arranged to form essentially an equipotential surface surrounding the conductor(s)  
[(31)].

Claim 7 (Amended), line 1, delete "characterized in";

Line 2, delete "that" and insert --wherein--; delete "(34)".

Claim 8 (Amended), line 1, delete "characterized in";

Line 2, delete "that" and insert --wherein--.

Claim 9. (Amended) A plant as claimed in [any of claims] claim 4[-8],  
[characterized in that] wherein at least two of said layers have substantially the same  
coefficient of thermal expansion.

A3  
Claim 10. (Amended) A plant as claimed in [any of claims] claim 4[-6],  
[characterized in that] wherein the current-carrying conductor comprises a plurality of  
strands, only a few of the strands not being insulated from each other.

Claim 11. (Amended) A plant as claimed in [any of claims] claim 1[-10],  
[characterized in that] wherein the winding comprises [consists of] a cable  
comprising one or more current-carrying conductors [(2)], each conductor [consisting  
of] including a number of strands, an inner semiconducting layer [(3)] being arranged  
around each conductor, an insulating layer [(4)] of solid insulation being arranged  
around each inner semiconducting layer [(3)] and an outer semiconducting layer [(5)]  
being arranged around each insulating layer [(4)].

Claim 12 (Amended), line 1, delete "characterized in";

Line 2, delete "that" and insert --wherein--; delete "also".

B  
A1  
B  
Claim 13. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein at least one electric generator [(200)] is arranged to supply the out-going electric network [(110)] directly without any intermediate connection of a step-up transformer (unit transformer).

B  
A1  
B  
Claim 14. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims] claim 1, [characterized in that] wherein at least one generator [(200)] is arranged to supply an out-going network [consisting of] comprising at least two part-networks, at least one part-network being supplied via an intermediate system transformer.

B  
A1  
B  
Claim 15. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims], claim 1, comprising [characterized in that it comprises] several generators, each of which lacks an individual step-up transformer but which, via a system transformer common to the generators, is connected to the transmission or distribution network [(110)].

B  
A1  
B  
Claim 16. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein the windings [(9, 51-53)] of the stator [(1)] in at least one generator [(200)] are arranged for connection to more than one voltage level.

B  
A1  
B  
Claim 17. (Amended) <sup>the</sup> A plant as claimed in claim 15, [characterized in that] wherein one of said voltage levels relates to generation of auxiliary power, this being generated from a separate winding [(9)] in the generator [(200)].

B  
B  
A  
C  
E  
Claim 18. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein at least one generator [(200)] is earthed via an impedance.

Claim 19. (Amended) <sup>the</sup> A plant as claimed in [any of claims] claim 1[-17, characterized in that] , wherein at least one generator [(200)] is directly earthed.

Claim 20. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein the stator [(1)] of the generator [(200)] is cooled at earth potential by means of a flow of gas and/or liquid.

Claim 21. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein the cables [(6)] intended for high voltage have a conductor area of between about 50 and 3000 mm<sup>2</sup> and have an outer diameter of between about 20 and 250 mm.

Claim 22. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein at least one winding [(9, 51-52)] of the stator [(1)] is carried out with integral slot winding.

Claim 23. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein at least one winding [(9, 51-52)] of the stator [(1)] is carried out with fractional slot winding.

Claim 24. (Amended) <sup>the</sup> A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein the rotor [(2)] of at least one generator is arranged for at least one of two [or] and four poles.

Claim 25. (Amended) *the* A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein the voltage level is controllable  $\pm 20\%$  of the rated voltage.

Claim 26. (Amended) *the* A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein the winding of the generator is arranged for self-regulating field control [and lacks] free of auxiliary means for control of the field.

Claim 27. (Amended) *the* A plant as claimed in [any of the preceding claims, characterized in that] claim 1, wherein the stator of at least one generator is composed of axially combined, plate-shaped sections, preferably as whole sections in peripheral direction.

Claim 28. (Amended) A plant for generating active and reactive electric power for a high-voltage distribution or transmission network [(110)], comprising at least one electric generator [(200)] which is coupled to at least one of a gas and[or] a steam turbine [(102)] via a shaft means [(101)] and comprises at least one winding, [characterized in that] wherein the winding of at least one of the electric generators comprises an insulation system which, as regards its thermal and electrical properties, permits a voltage level in excess of 36 kV.

Claim 29. (Amended) An electric generator [(200)] arranged to be coupled to at least one of a gas and[or] steam turbine [(102)] via a shaft means [(101)] and comprising at least one winding, [characterized in that] wherein the winding comprises a solid insulation system consisting of at least two semiconducting layers, each layer constituting essentially an equipotential surface, and also intermediate

solid insulation, wherein at least one of the layers has substantially the same coefficient of thermal expansion as the solid insulation.

Claim 31. (Amended) A procedure for manufacturing an electric generator as claimed in claim 29 [or claim 30, characterized in that] wherein the stator is wound at the plant site where the generator is to be used.

Claim 32 (Amended), line 1, delete "characterized";

Line 2, delete "in that" and insert --wherein--.

Add new claims 33-44 as follows:

---33. A plant for generating active and reactive power for a high-voltage distribution including at least one rotating high voltage electric machine comprising a stator; a rotor and a winding, wherein said winding comprises a cable including at least one current-carrying conductor and a magnetically permeable, electric field confining cover surrounding the conductor, said cable forming at least one uninterrupted turn in the corresponding winding of said machine.

34. The plant of claim 33, wherein the cover comprises an insulating layer surrounding the conductor and an outer layer surrounding the insulating layer, said outer layer having a conductivity ~~sufficient to establish~~ an equipotential surface around the conductor.

35. The plant of claim 33, wherein the cover comprises an inner layer surrounding the conductor and being in electrical contact therewith; an insulating layer surrounding the inner layer and an outer layer surrounding the insulating layer.

36. The plant of claim 35, wherein the inner and outer layers have semiconducting properties.

37. The plant of claim 33, wherein the cover is formed of a plurality of layers including an insulating layer and wherein said plurality of layers are substantially void free.

38. The plant of claim 33, wherein the cover is in electrical contact with the conductor.

39. The plant of claim 33, wherein the layers of the cover have substantially the same temperature coefficient of expansion.

40. The plant of claim 39, wherein the machine is operable at 100% overload for two hours.

41. The plant of claim 33, wherein the cable is operable free of sensible end winding loss.

42. The plant of claim 33, wherein the winding is operable free of partial discharge and field control.

43. The plant of claim 33, wherein the winding comprises multiple uninterrupted turns.

44. The plant of claim 33, wherein the cable is flexible.--

If any multiple dependencies exist in the claims, it is respectfully requested that such dependencies be removed.